

Newsletter

Residential Renovation towards nearly zero energy CITIES



Welcome to the 4th issue of the R2CITIES



Our project to pave the way for nearly zero energy cities is now at its mid-point.

Since the project's inception two years ago, we have sought to maximise outreach to a wide range of stakeholders. As part of our endeavours in this respect, we have set up the MySmartCityDistrict (MSCD) with six other projects. Together they represent some 22 districts across Europe, allowing us to leverage our efforts more effectively, while providing our consortium the opportunity to learn from these other projects as we progress towards our own goals.

Just recently, during the European Sustainable Energy Week (EUSEW), we saw a concrete example of this cooperation when some demo sites from MSCD member projects decided to open their doors and show citizens, schoolchildren, policy makers and building professionals what these projects are all about. The aim was, as always, to obtain buy-in and promote replication of energy efficiency in the built environment. More details about this operation, dubbed OpenHouse@EUSEW2015, are featured in this issue.

In the same vein, we are currently developing mini websites for R2CITIES in the languages of the project demo sites. These are designed to provide an interface between the local demo teams, tenants and local stakeholders. This content localisation is a key element in outreach. It will allow our project to be better understood, and accepted, by local stakeholders including end-users. The issue of user acceptance is paramount in demonstration projects such as R2CITIES, especially when users are called upon to participate financially in the retrofitting works.

With best wishes

Rubén García Pajares - R2CITIES Coordinator
Fundación CARTIF

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R2CITIES holds its 4th periodic meeting in Valladolid as the project reaches its half-way point.

Valladolid-based Fundación CARTIF played host to the R2CITIES consortium on 22-23 May when the project's 4th periodic meeting was held.



This four-year project is now at its mid-term and coordinator Rubén García opened the meeting by presenting the ground covered over this first half of the project's lifecycle. He emphasised how the consortium had been able to deal with a change of demonstrator in the first year and how the project consortium had become a good team with most deliverables accomplished on schedule and validated.

As the project finishes its second year, the focus is now on the three demonstration sites in [Kartal](#) (Turkey), [Genoa](#) (Italy) and [Valladolid](#) (Spain) where public tendering rounds and public grant procedures are still ongoing. These refer to the purchase of the intervention technology along with the contractors who are to actually deliver both the passive and active energy efficiency solutions based on the project's preliminary work. The meeting highlighted the fact that this has proven to be quite elaborate and in some cases circuitous. At this stage of the project it is crucial that we push ahead steadily with winding up the tenders and getting all of the interventions underway. It is also now that the monitoring activities of the demo sites are due to start.

From this meeting, we can report that over 75% of the performance diagnosis and indicators, including user acceptance surveys, have completed. In addition, protocols for measurement and verification of energy performance have been adapted to district renovation interventions, and an M&V plan and guidelines for each demo site have almost been finalised. This part

of the project is intensive with the development of a web platform for monitoring and management at district level on Service Oriented Architecture: the **District Monitoring Platform** at general level and the **Energy Management Platform(s)** at local level. The prototype of this platform will be made available to partners by the end of the year, and is currently being developed. Its purpose is to manage all the methodologies, solutions and algorithms developed by the project's other work packages. In this way all the fundamental data and information will enable the Energy District Manager and building managers to make manual decisions or wherever possible automated decisions. The **District Monitoring Platform** constitutes the basis for generating and communicating the KPIs requested by the Smart Cities Information System (SCIS, formerly CONCERTO).

As has become customary for these periodic meetings, parallel sessions took place on specific technical areas of the project such as the solar solutions to be deployed in R2CITIES or business models and LCA/LCC.

Dissemination issues concerning the demo site level were on the agenda, as was a visit to the Spanish **demonstration site** in Valladolid.

Smart Data to evaluate return on retrofitting investment

Saving money by cutting the energy consumption of buildings is not strictly a question of technology. People need hard data to be convinced of the positive financial implications



Retrofitting technology could benefit the EU economy enormously. Such activities could save up to 60% of a building's energy consumption and this would translate into **direct savings in energy expenditure**. But energy technology alone is only part of the answer. There are also other barriers to retrofitting such as financial, legal and political impediments.

To tackle these issues, **data collection on how energy is used in buildings is key**. Now, an Italian energy efficiency company, [Officinæ Verdi](#), based in Rome, has developed an innovative building management system (BMS) that can directly link energetic performance to financial impact.

This could help convince those making decisions to support high costs for renovation works, such as banks, of the benefits of retrofitting, based on hard data. It could also drive changes in people's energy consumption behaviour.

Data-driven savings

Officinæ Verdi is working on public buildings, through the European project R2Cities. "We are involved in technology-payback analysis; this means we evaluate the financial sustainability of each technology," says Giovanni Tordi, CEO of Officinæ Verdi.

He explains that several issues often prevent the implementation of retrofitting like a thermal coat insulation: the considerable costs, the credit crunch and the involvement of all the owners of the building.

Thus, "**data could be used as a base for presenting a renovation project to a bank for getting the financial support that is needed,**" affirms Simone Tola, coordinator of the public Agency for energy in the Venice province, Italy. In the long run, such fact-based investment may help businesses and the public sector make important energy saving interventions.

To realise the value of energy saving achieved, monitoring is key. An example of such monitoring system is the Mætrics Advanced BMS platform developed by Officinæ Verdi.

It gathers information on energy flows and building environmental parameters—such as humidity, indoor and outdoor temperature, etc.—thanks to a network of sensors displaced in strategic points. Through the platform's software console, **a building manager can analyse the energy consumption inefficiencies in detail**. They can also directly link energetic performance with financial cost. This enables fact-based forecasting

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for future bills.

User behaviour shift

However, data collection may only be part of the issue. It has to be combined with a “smart man-machine interface,” says **Fabio Morea**, a retrofitting engineering expert at Area Science Park, a cluster of university spin offs and start-up companies in Trieste, Italy. **“What is essential in energy saving and sustainability is fusing technological interventions with changes in people’s behaviour.”**

The data collected by a platform, such as Mætrics Advanced, could be “a fundamental drive to change how people behave with respect to energy efficiency”, he adds. And changing behaviour is difficult, particularly if people do not see an immediate payback. “We have the technology to retrofit the existing buildings, boost energy savings and limit inefficiencies,” says Tola.

Private vs public

But there could be big differences between the private and public sectors. **“Data collection can be used as a leverage, especially if it is directly linked to economic savings,”** Tola notes, “but it is much easier in the private than in the public sector.”

If a building manager of a company can see a way to save money in a financially sustainable way, he or she would go for it. “But in the public

administration, that would mean that extra-technical and political aspects of energy management should make a little step back,” he adds. Energy and financial data should provide a fact-based platform to determine the development of energy management of public buildings. But it is not so common.

Article by Marco Boscolo

Rubén Emre Yöntem: Meeting energy efficiency targets

Energy efficiency of a building can be calculated throughout its first 60 years of life after retrofitting thanks to Life Cycle Assessment



A **new modelling platform** can create scenarios designed to show the environmental impact of retrofitted buildings. It also helps calculate the expected reductions in energy consumption and the related costs of refurbishing. This is possible thanks to a web platform called [Epesus](#), developed by the Turkish environmental engineering consultancy [Ekodenge](#), based in Ankara. The consultancy is also one of the partners in the European project R2Cities.

Emre Yöntem, project manager with expertise in energy modelling and data management at Ekodenge, explains how the return on investments can be achieved through energy savings, on the long run.

What innovation brings your team in the construction industry?

Under this project, our team is working on its capabilities to study the district areas and has embedded the **Life Cycle Assessment (LCA)** and **Life Cycle Cost (LCC)** analysis methods. LCA comprises all the life cycle phases of a product, from the acquisition of the raw materials to the waste phase. It assesses its environmental impact. In a similar way, the LCC analyses the cost of a product. We do these calculations with specific software tools. **LCA is compulsory under recent international green building certification systems.** To be more specific, the green

certification system uses a database of construction materials and their environmental scores provided by Life Cycle Assessment. Only the use of those materials is allowed, in order for such a certificate to be issued. Future sustainable cities and buildings definitely need to focus on LCA scores. **The Epesus platform we developed makes it possible, to compile the life cycle inventories in retrofitted buildings.** Specifically, we can thus analyse the cost of the materials used in the retrofitting works. And it also helps make hourly simulations of the energy demand of the refurbished building. By making possible **to analyse different kinds of retrofitting approaches** at the preliminary stages of the project, they help the project owner to select the scenario that fits his needs and budget. It is in fact the approach of the urban methodology concept, which is implemented in smart, green cities.

What is the potential benefit of an LCA before starting a retrofitting work?

It is possible to show that the complete cost of the refurbishing work could be lower than for other constructions, if specific materials are used. It is like evaluating the cost of leasing an expensive car. The purchasing price can be high, but **this car provides better returns over time than a cheaper one because of its longer and more efficient life cycle.** At city level,

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an LCA can show that a building can have less carbon emissions and healthier indoor air quality, despite a high construction cost at the beginning of its life cycle. So, **the tools helps the decision makers to quantify these benefits** within the first 60 years of the life of the building, including its possible demolishing and waste treatment phases.

What is unique about your approach?

By adding to our evaluation model other data than traditional LCA, **we provide holistic analysis of the cost of the ownership of the building throughout 60 years**. For example we account of the raw materials used for retrofitting work; not only do they provide energy savings when the building is in use but also the cost savings at the final demolishing and waste treatment phase. Besides, **the material inventories include information about the embedded energy or carbon dioxide**. We also add the unit cost of all those materials, which we analyse as material flows in the city ecosystem.

But the real novelty of our **LCA methodology consists of adding a dynamic structure to the data**. Instead of using the average energy consumption value for an average building, we run simulations based on real life data and make incremental calculations. We use the data from the location of the site. For example, we use different energy mix, because the energy mix in Turkey is different from that in a Scandinavian country, for instance. We take into account the type of the energy, whether it is hydraulic, fossil fuel or renewable etc.

When will the project's retrofitted showcase building in Istanbul reach its target 60 % energy savings?

In most of the cases, whether they are a residential

or social housing building or even an office, **retrofitted buildings perform the least well in their first year after commissioning**. This is because such buildings need to be optimised. And the occupants need to change behaviour. When we talk about energy savings in buildings, **the behaviour of the dwellers is very important**. Indeed, the building can be very energy efficient, but, if the inhabitants want to have 27 degrees indoors during winter or even open windows, the building will no longer be energy efficient. Instead, the residents are expected to accommodate with certain comfort standards; for example, 21 degrees in Southern countries and 18 degrees in Northern countries. Normally, a mechanical system provides the comfort temperature and also a healthy environmental indoor air quality standard. Besides, **our project showcase building in Istanbul is a social house for old people**. It has only one year monitoring phase, which is not the time of its highest performance. They are not permanent inhabitants, and they have a changing behaviour. Our project team hopes to cope well with this risk by maintaining a very close relationship with the buildings occupants and operators to maximise the first year performance.

Article by Sorina Buzatu

In the spotlight: ABB
 ABB is a global leader in power and automation technologies. Our solutions improve the efficiency, productivity and quality of our customers' operations while minimising environmental impact.

Innovation is at the forefront of what we do and many of the technologies that drive modern society were pioneered by ABB. Each year we dedicate around \$1.5 billion to fund research and development activities driven by our 8,500 technologists in our five divisions and seven corporate research centres.

Maintaining our position as one of **the world's leading engineering companies** requires technology leadership, global presence, application knowledge and strong local expertise. We create and support a comprehensive range of products, systems and services that increase energy efficiency, reliability and productivity for our industrial, utility and infrastructure customers.

With a **125 year heritage of technology innovation**, ABB continues to shape the grid of the future. The Power Systems Division focuses on the generation, transmission and distribution of energy from traditional and renewable sources: electricity in fact is generated in power plants using various fuel sources - some traditional, like coal and gas (thermal) and increasingly renewable energies, like wind, solar and hydro. The generated electricity is then integrated into the electricity grid and transmitted across distances through overhead, underground and sub-sea cable systems. Once it reaches closer to consumption centres, distribution networks carry it through to industrial, household and commercial end users.

Within the R2Cities project, ABB is in charge of the requalification of a building called "Lavatrici" (washing machines) because of their curious aspect, located in a Genova area. Tests will focus on passive low cost solutions, and on enhancing natural resources like the daylight and natural ventilation in four apartments, 2 of which inhabited and the remaining two empty. ABB takes care of the distributed sensor system and will centralise all information in one software platform which will collect data on the temperature, humidity, velocity of air fluxes, air quality, indoor and outdoor lighting and weather parameters. This kind of analysis will be implemented according to algorithms studied to optimise costs and comfort and discomfort evaluation.

In detail, ABB has and will carry out the following:

- Microclimate analysis aimed at the global thermo-hygro-metric comfort and discomfort evaluation;
- Monitoring of microclimate factors, such as: relative ambient temperature and relative humidity, lighting-technique comfort evaluation, velocity of air fluxes, air quality evaluation;
- Outdoor monitoring conditions;
- Diagnostic of the communication and devices for the monitoring systems.



*“As a member of the Genoa Smart City Association managing board, **ABB Italy** will actively work on the Genoa project but we are very keen to supply guidelines and advice to the other groups on energy efficiency”*

Stefania Alquati
 Communications Specialist

Contacts

Website: www.abb.com

Stefania Alquati
 Communications Specialist
Stefania.alquati@it.abb.com

In the spotlight: D'Appolonia S.p.A

D'Appolonia S.p.A, part of the RINA Group, is the largest fully independent Italian firm providing consulting & engineering services to clients belonging both to the public and the private sector.

The company operates in the markets of Energy, Transport and Infrastructures, Industry and Investor Support.

D'Appolonia is a team of engineers, consultants, designers, planners and specialists supporting public and private Clients from concept to decommissioning, through consultancy, design, management, operation and maintenance.

The company provides a wide range of services covering the whole project life cycle from feasibility and specialised technical studies to conceptual and detailed design, prototyping and testing, project management, site engineering as well as operation and maintenance management.

Innovation is a key element in all our projects; D'Appolonia has over twenty years' experience in helping its clients in developing their new products and services as well as managing their collaborative innovation processes.

D'Appolonia is member of the High Level Group of the European Construction Technology Platform (ECTP) and is also a founding member of the Energy Efficient Buildings Association (E2BA).

In the framework of the European initiative on Smart Cities, D'Appolonia supports city municipalities and public authorities in identifying and targeting all actions which contribute to the achievement of objectives set in their energy plans.

Within R2cities, **D'Appolonia is responsible for the definition of the diagnosis methodology and indicators of performance coordinating the activities in the three demo sites linked to: energy audit, financial plans, technology payback analysis and users acceptance test.**

D'Appolonia is moreover responsible for the overall coordination of demo implementation with the Genova demo case study.

D'Appolonia will follow all the phases from design to implementation to measurement and verification analysis and will cover the energy specialist role together with the University of Genova. D'Appolonia is responsible for the development of the district management platform dealing with the data coming from each energy management platform and aiming to support the district energy manager in the energy benchmarking of different scenarios.

D'Appolonia is, and will, be active for all the duration of the project and is particularly interested in the outcomes that will be achieved in order to identify clever solutions for the renovation of residential district.



“The lessons learned will be used identify replication scenarios across the D'Appolonia consolidated network. In addition from the involvement within R2cities project D'Appolonia aims to greater insight on the functional elaboration of data collected on real environment.”

Margherita Scotto
project engineer

Contacts

Website: www.dappolonia.it

Matteo Porta
matteo.porta@dappolonia.it
Margherita Scotto
margherita.scotto@dappolonia.it

In the spotlight: Officinæ Verdi

Officinæ Verdi (OV) is an Energy Efficiency Group created in 2011 by the UniCredit Group in Joint Venture with WWF Foundation.

Currently, Officinæ Verdi Group operates as a Management Company and Advisor for developing “Green Economy Applied” investments, combining financial and technological know-how in the energy sector, with a consolidated expertise in complex investment projects for energy-intensive sectors.

Officinæ Verdi has developed an operational capability to support a wide ranging analytical process from engineering to construction and environmental certification. This includes a very advanced financial and technical approach combining analytical skills, green technologies, investment and environmental impact assessments.

With a volume of investments generated in energy efficiency and GreenTech sector in Italy and Europe equal to €93.4M between 2013 and 2014, Officinæ Verdi can nowadays lay claim to a consistent portfolio of assets which it manages and monitors (465 plants, with an approximate value of €927M). Such investments are the result of research and development activities with the objectives of measuring operations (3.8% R&D investments with respect to arranged ones). Besides economic indicators, other two indices significantly describe the company activities: the Social Impact Index, which amounts to 3,748 direct and indirect green jobs generated by OV-managed projects, and CO2 impact index, which amounts to 391,906 tons of CO2 saved through investments and managed assets.

At the moment, Officinæ Verdi is involved in three European Projects: R2 CITIES (FP7), REMOURBAN and TRUST EPC SOUTH (HORIZON 2020) as advisor on the economic and financial sustainability assessment of technologies in the energy efficiency sector.

Within **R2CITIES**, Officinæ Verdi has responsibility in:

- supporting the development of Technology Payback Analysis and Business Cases and evaluating retrofitting technologies according to a rigorous technical and economic analysis
- measurement and verification of energy performance post-intervention
- defining business models for the development of the energy efficiency market
- communication and exploitation activities

The ultimate target of the project is to reach a proper methodology in order to identify economically sustainable technological solutions, replicable to different settings.



“Energy efficiency could produce a business capacity about yearly €300 billion and 20 million new jobs (WWF data), as the Juncker Strategy to defeat the European recession. Thanks to Energy Efficiency European Directives (2012/27/EU and 2010/31/EU) aiming for a target of nearly zero-energy cities in 2020 and connecting energy performances with sustainable economic standards, national governments are supporting new financial instruments. A good opportunity to move from the current industrial model to a new sustainable one.”

Giovanni Tordi
Chief Executive Officer

Contacts

Website: www.ovaerdi.com

Valentina Luzzatto
v.luzzatto@ovaerdi.com

Serena Olivetta
s.olivetta@ovaerdi.com

Doors wide open at R2CITIES demo sites during the European Sustainable Energy Week

The European Sustainable Energy Week (EUSEW) took place from 15-19 June and provided the backdrop for the MySmartCityDistrict initiative to hold a series of events dubbed OpenHouse from across four member projects - R2CITIES, ZenN, EU-GUGLE and CITYFiED.

These **OpenHouse** events were among nearly 700 other “energy days” and side events that took place in June as part the **EUSEW2015**.

The four MSCD projects opened up nine of their districts through guided tours to refurbished districts, visits inside buildings, exhibitions on concepts and practice, forums, roundtables and online video messages. R2CITIES demo sites Kartal and Genoa hosted in-situ events and Valladolid produced a video highlighting its endeavours with our project.

Today [My Smart City District](#) brings together 7 projects involving some 22 districts from 12 different countries.

As such, its OpenHouse initiative was an ideal opportunity for participating districts to gain the attention they deserve as they venture into the challenging process of moving towards smarter and greener urban environments. The advantage was double; **projects can communicate to relevant stakeholders more effectively, and are better positioned to learn from one another.**

OpenHouse in Yakacik, Kartal

Kartal Municipality organised a seminar entitled “**BIM (Building Information Modelling) for Energy and Sustainability**” that took place on 17 June.

Some **150 people** attended from a wide range of fields



including: public institutions, universities, Turkey’s R2CITIES project partners, local businesses, NGOs, citizens, and local and national press.

On the agenda were a series of presentations about using BIM-Building Information Modelling in design, implementation and operational processes and its input-outputs in the scope of energy and sustainability. The event was able to **raise awareness for local policy makers** and building professionals about specific planning and implementation issues that are key to energy efficiency and sustainability.

Open House in Lavatrici district, Genoa

The OpenHouse event in the **Lavatrici** district was organised by the Municipality of Genoa on 19 June. It brought together around **50 participants**, many of whom were local residents, Faculty of Architecture students, freelance professionals and municipal representatives.

A presentation of R2CITIES was delivered highlighting the state-of-the-art of the project’s interventions and methodology.

The showcase centred on the installation of window fixtures, the new central heating system and home automation tools (domotics) in some of the flats.

The project will involve the replacement of fixtures

in 162 flats within the buildings located in Via Pavese and Via Vittorini, known locally as "High Bars."

Following the **presentations, attendees were invited to a guided tour** to two flats where the new fixtures have already been assembled. In this way, they were able to better understand the extent of the works and to visit the "on-site laboratories" where passive testing is carried out. The event concluded with an aperitif offered by Municipality of Genoa and organised alongside the neighbourhood committee which collaborated at all the stages of the event offering their valuable support.

OpenHouse in Valladolid

As coordinator, Fundación CARTIF in Valladolid participated in the **EUSEW2015** with a short video introducing both the MySmartCityDistrict and OpenHouse initiatives as well as the R2CITIES project. The video also provides some background information about the interventions, present and future, for Valladolid's demo site, the Cuatro de Marzo district.

[Click here for the 3 video](#)



Kartal's tendering process is ongoing with a procedure launched mid-June for the renovation of the nursing home and two small building blocks. This should be completed by early August.

Kartal Municipality's training activities have been successfully completed. The three members of the Municipality's project team who underwent the course on BIM were awarded certificates from ITU in April. Two further members also successfully completed a specialist energy course delivered by the Chamber of Mechanical Engineers in the same month.



What's New on Social Web?

Since its launch in March 2015 R2CITIES Twitter account [@R2CITIES](#) has brought the latest news and developments of the project to a wide range of stakeholders and audiences. The project account has been launched to direct the conversation already happening on Twitter towards its official account, as well as to raise awareness and increase the project sphere of influence online.

The **social media strategy** foresees a high-level of interactions with other EU-smart city projects and important stakeholders (the EU-institutions, Covenant of Mayors, Energy Cities, Eurocities, Climate Alliance, ICLEI and individual personalities on the energy field). Vital to the life of the account and to the quality of the content shared by the latter is the participation of the R2CITIES partners, which has been established since its launch and growing during specific occasions, such as, the attendance or organisation of events.



The recent **OpenHouse** events organised by the R2CITIES demo sites during **EUSEW 2015** brought to the attention of an EU-level audience the activities carried out at local level, thus, up scaling the local level dissemination to worldwide audience.



High impact and good traffic is also given by the relation established with the My Smart City District initiative, whose social media channels (Twitter, LinkedIn and YouTube) are additional content multipliers sustaining R2CITIES outreach and increasing its dissemination impact.



Real cities, real solutions, real impact – R2CITIES and fellow projects cluster together to extend their reach and impact in South & Eastern Europe



Four complementary projects chose to join forces during the [‘Smart Cities’ – Exhibition and Conference for South - East Europe](#), 11-13 March 2015, in Sofia, Bulgaria where R2CITIES, CITYFiED, RemoUrban and Direction hosted a common exhibition stand and shared their knowledge in the accompanying professional conference.

Between them, the projects represent 12 demonstration sites and 17 follower cities delivering tangible partnerships and achievements in large-scale renovation and replicable smart cities initiatives. This rich experience helped to present a range of expertise to exhibition visitors and congress attendees - from cost-effective innovations creating the latest near zero-energy new buildings and retrofits to replicable strategies for smarter cities and citizen-driven urban regeneration.

In a panel session chaired by **Krisztina Dely** of the Covenant of Mayors, **Ruben García**, Head of Smart Cities at CARTIF gave a presentation profiling nine case studies in financing from across the EU – drawing heavily of the experiences of R2CITIES; while **Miguel García**,

also of CARTIF and RemoUrban project manager, spoke about the methodology to evaluate residential districts renovation towards nearly **Zero Energy Districts (nZED)**.

Amongst the many discussions, the exhibition was a valuable opportunity to discover the region’s initiatives in energy efficiency and smart cities. All four projects came away with a greater understanding of the key stakeholders and their requirements – hopefully a solid basis for further replication and future partnerships.

Legend: Krisztina Dely of the Covenant of Mayors and EnergyCities meet with CARTIF and youris.com representatives

News from our networks

R2CITIES at the EeB PPP Impact Workshop 2015

R2CITIES was present during the recent EeB PPP Impact Workshop 2015, along with 9 other projects in Area 4: Deep energy renovation of districts and smart energy efficient solutions for cities. Ali Vasallo (CARTIF) was presenting current and expected impacts of these ten projects, and both he and Julia Vicente as well as Helga Treiber from youris.com joined forces to represent R2CITIES at the event. Crosscutting technological issues in this group of projects concern the methodology applied to deploy highly energy efficient retrofitting techniques, reducing the gap between projected and actual energy use, providing the construction sector with specific abilities, as well as sharing a common data monitoring structure.

Among the non-technological issues, citizen's engagement and business models for public procurement are of major concern. Synergies and benefits of clustering projects were highlighted, such as the MySmartCityDistrict initiative in which R2CITIES is participating.

R2CITIES gets smart in Amsterdam

The R2CITIES project shared its insights into accelerating smart urban transformation this 2-5 June at [the Smart City Event in Amsterdam](#).

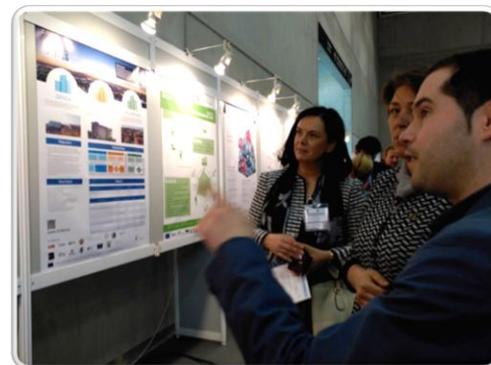
Whilst the main agenda had plenty for the 500 or so participants, with keynote speeches from Neelie Kroes and a range of academic and industry, R2CITIES shared project plans in detail in a central presentation and accompanying round table discussions. Rubén García, Head of Smart Cities Projects, CARTIF and Sergio Sanz, Smart City Valladolid and Palencia representative and Head of Energy department, CARTIF co-chaired a roundtable session on designing, constructing, and managing large scale residential district renovation projects to achieve nearly zero energy cities.

With some solid progress across three demonstration sites, nearly 60,000m² of conditioned areas in renovation and results appearing from the project the team had some productive discussions with interested stakeholders from across Europe. Specific attention was paid to the cost effectiveness and the creative new business models being explored in R2CITIES.

Metropolitan Solutions

The [Metropolitan Solutions](#) smart-city event gathers around 4,000 experts every year and representatives from Cartif attended the fifth edition of 20-22 May in Berlin. Ali Vasallo of the Energy Division had the chance to meet Mrs. Violeta Bulc, European Commissioner for Transport to present the projects, their ambitions and the cities and consortium members making them a reality.

R2CITIES, together with REMOURBAN and CITYFiED had a poster at the exhibition.



*Ali Vasallo talking
Commissioner Bulc
through R2CITIES
scope and
achievements*

R2CITIES coordinator at Spain's Smarty City Congress – Madrid

R2CITIES coordinator Rubén García participated in Spain's Smart Cities Congress that took place in Madrid between 24-25 March. This national event was aimed at exchanging knowledge and experience about smart cities across the country, and taking on-board initiatives and experience from other countries.

As head of smart city projects at Fundación CARTIF, Rubén García delivered a presentation entitled « strategy for rehabilitating and transforming residential areas into nearly zero energy zones ». This was based on the project CITYFiED project, one of six other projects, including R2CITIES, that belong to the MySmartCityDistrict group.

Recommended events

Interesting upcoming events selected by the R2CITIES team

Events	Description
	<p>Cisbat 9 – 11 Sept 2015 Lausanne, Switzerland</p> <p>"Future Buildings and Districts - Sustainability from Nano to Urban Scale" is the slogan of 2015's international scientific conference CISBAT. Every two years, building scientists, industry, research, academia and other professionals active in the domains of renewable energy, sustainability, building and urbanism get together at this worldwide event. CISBAT 2015 will be held in the Swiss city of Lausanne on 9 - 11 September 2015 offering a platform for dialog and presentations focused on sustainable building and urban district design and featuring high-level keynotes, thematic sessions and technical visits. <i>For further information:</i> Cisbat</p>
	<p>Sustainable Places 2015 16-18 Sept 2015 Savona, Italy</p> <p>The 3rd edition of Sustainable Places will round up key stakeholders from the energy efficiency value chain in Savona. Around 200 scientists, researchers and engineers from research institutes and the industry are expected to attend this annual worldwide conference. Energy efficiency at building, district and city levels will be at the core of the event. Organised by EU-projects RESILIENT and PERFORMER, Sustainable Places 2015 will foster dialogue and clustering among projects funded under FP7 and H2020 EeB PPP. Julia Vicente and Ali Vasallo from CARTIF are represented in the Technical Programme Committee. <i>For further information:</i> Sustainable Places</p>
	<p>World Green Building Week 2015 21-25 Sept 2015 Global</p> <p>World Green Building Week started in 2009 to create a more connected, more interactive, more public conversation around the role buildings play in creating our sustainable future. This event provides the global platform to showcase activities internationally around a central theme and shared resources. Activities vary country by country. This year, the story focuses on how green buildings are powering positive change around the globe. Buildings consume a third of the world's energy and are responsible for a fifth of global emissions. This could double or even triple by 2050. Green buildings are contributing to positive change - slashing energy use and emissions, saving water and preventing waste to landfill, and providing healthier places for people. <i>For further information:</i> World Green Building Week</p>

Contacts

More information on this Newsletter and related dissemination and communication activities of the project available at:

R2CITIES D&C Secretariat

e-mail:

secretariat@r2cities.eu

Project Coordinator

Centro Tecnológico CARTIF
Parque Tecnológico de Boecillo 205. C.P. 47151
Boecillo, Valladolid - España
Tel. 0034 983 54 65 04
Fax 0034 983 54 65 21

Coordinator

Rubén Garcia Pajares
Energy & ICT Divisions
Fundación CARTIF

e-mail:

contact@r2cities.eu

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